

REMARKS/ARGUMENTS

Claims 1-5, 7-12 and 21 are pending in this application.

Claim Objections

In paragraph 2 of the Action, the Office has objected to Claims 1, 4, 8, 11 and 21 for improper Markush-type claim format. Applicant presumes that the objection should also have been made to Claim 10 as well as it, too, recites a Markush-type limitation. Claims 1, 4, 8, 10, 11 and 21 have been amended to employ proper Markush-type claim formats.

Amendments to the Specification

It is well settled that an applicant is entitled to be his or her own lexicographer and may rebut the presumption that claim terms are to be given their ordinary and customary meaning by clearly setting forth a definition of the term that is different from its ordinary and customary meaning. See *In re Paulsen*, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994). Applicant respectfully submits that the term “bandwidth” has been clearly defined as meaning “interconnect channel capacities” in the present application.

However, in the interests of clarity, the Applicant has provided replacement paragraphs for the specification which remove references to “bandwidth” and substituted the phrase, “interconnect channel capacities.” Applicant respectfully submits that no new matter has been added.

Claim Rejections – 35 U.S.C. § 102

In paragraph 5 of the Action, the Office has rejected Claims 1 and 10 under 35 U.S.C. § 102 as being unpatentable over U.S. Patent No. 6,539,531 to Miller et al. (Miller). The Office has cited Miller for its disclosure of “interconnection including scalability (scalable according to **bandwidths**)” (emphasis added).

Applicant respectfully submits that Applicant’s use of the term “bandwidth” throughout the application has not been in accordance with its ordinary and customary meaning. The ordinary and customary meaning of the term bandwidth generally refers to the operating frequency range of a given electrical circuit. However, as detailed in Paragraphs 0047 and 0052 of the Application, the term bandwidth has been used by the Applicant to mean “interconnect channel capacities” (e.g. MB/s.) Paragraph 0047 specifically discloses:

“In the illustration shown in FIG. 2, bandwidths are shown with varying degrees of lines with arrows.”

The “arrowed lines” depicted in FIG. 2 are depicted with exemplary interconnect channel capacities (e.g. 4 MB/s). Additionally, Paragraph 0052 of the Application specifically discloses:

“In this example, bandwidth is specified for the interconnections indicated in FIG. 4. For instance, **a bandwidth of 2 MB/s** may be defined for an interconnect 314 between a processor 316 and RAM 304 by a user, such as by selecting the interconnect 314 and accessing a menu, an input box, and the like” (emphasis added).

Numerous other references may be found in other portions of the Application directed to descriptions of the interconnect channel capacities for interconnects

between various IC components. As such, it appears clear that all references to “bandwidth” in the present Application are intended to refer to interconnect channel capacities and *not* to frequency ranges. As such, all references to “bandwidth” throughout the Specification and Claims have been amended to reflect Applicant’s intended meaning of the “interconnect channel capacity” definition.

In view of the intended use of the meaning “interconnect channel capacities,” Claims 1 and 10 have been amended to recite that the IC optimizations may be based on “interconnect channel capacities, scalability of interconnect channel capacities, or isochronous interconnect configuration.” Such a limitation clearly distinguishes over Miller. Miller fails to disclose, teach or suggest all the elements recited in Claims 1 and 10, specifically integrated circuit design optimization based on “interconnect channel capacities, scalability of interconnect channel capacities, or isochronous interconnect configuration.” Accordingly, the removal of all the pending rejections under 35 U.S.C. §102 in view of Miller is respectfully requested.

Claims 2-5, 7-9, 11-12 and 21 are believed to be allowable based on their dependence upon allowable base claims.

CONCLUSION

In light of the forgoing amendments and arguments, reconsideration of the claims is hereby requested, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

LSI Logic Corporation,

By: 
Scot Ringenberg
Reg. No. 56,989

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Scot Ringenberg
SUITER · SWANTZ PC LLO
14301 FNB Parkway, Suite 220
Omaha, NE 68154
(402) 496-0300 telephone
(402) 496-0333 facsimile